



SMITHSONIAN INSTITUTION
U. S. NATIONAL MUSEUM

Vol. 103

Washington: 1955

No. 3337

NEOTROPICAL MIRIDAE, LXIV: NEW BUGS OF THE
SUBFAMILY CYLAPINAE (HEMIPTERA)

By JOSÉ C. M. CARVALHO¹

Through the courtesy of the U. S. National Museum I was able to study specimens of Cylapinae in that institution's collection, among which were found the new genera and species herein described.

Brachyfulvius, new genus

Cylapinae, Fulviini. Body rounded, strongly convex on hemielytra, distinctly shagreened and very short pubescent.

Head elongate, protruding between the antennae, somewhat horizontal, with a very short neck; eyes small, slightly removed from anterior margin of pronotum; vertex sulcate; seen from side, clypeus prominent, gula long; rostrum reaching about middle of abdomen, the first segment reaching level of base of head, remaining segments decreasing gradually in thickness.

Antennae inserted in front of eyes, removed from anterior margin of the latter by a space equal to thickness of base of first antennal segment, the latter thick, incrassate towards the apex, second segment linear, about 2.5 times longer than the first, both shortly pilose; third and fourth joints very slender and longly pilose.

Pronotum with a distinct collar, the calli strongly raised and forming two conical protuberances with a median furrow, both occupying an area of about three-fourths of disc, anterior margin of pronotum curved posteriorly, lateral margins rounded and depressed anteriorly, then

¹Museu Nacional, Rio de Janeiro, Brazil; John Simon Guggenheim Memorial fellow, 1953. Additional help granted by the Brazilian National Research Council.

strongly emarginate, humeral angles prominent, posterior margin widely emarginate; mesoscutum broadly exposed; scutellum small with a median conical protuberance.

Hemelytra brachypterous, shagreened, strongly convex at middle, without membrane, cuneus absent (in its place there is a calloused area over margin of corium), clavus, corium, and embolium fused but delineated at base, the embolial area flattened throughout.

Apex of abdomen, seen from above, showing a short anal tube. Legs shagreened, the anterior femora narrowed towards the apex, tibiae with short spines and hairs, tarsi long, claws of the Cylapinae type, very long and slender. Two last legs mutilated.

Type of genus, *Brachyfulvius chapini*, new genus, new species.

This genus is easily differentiated from others of the tribe Fulviini by its brachypterous condition and the strongly raised calli and scutellum. At first sight it resembles a small beetle.

Brachyfulvius chapini, new species

FIGURES 72, 74,a; PLATE 15,A

Characterized by its color, dimensions, and protuberances of pronotum.

Female: Length 2.8 mm., width 1.5 mm., head length 0.5 mm., width 0.6 mm., vertex 0.35 mm. Antennae segment I length 0.3 mm.; II, 0.8 mm.; III, 0.3 mm.; IV, 0.4 mm. Pronotum length 0.4 mm., width at base 0.9 mm. Rostrum length 1.7 mm.; segment I length 0.42 mm.; II, 0.45 mm.; III, 0.42 mm.; IV, 0.48 mm.

Color dark brownish; head, rostrum, antennae, legs, and embolial area lighter; apical callosity of corium and anal tube yellowish; second antennal segment whitish at apex; coxae light with a reddish tinge on the inner surface.

Morphological characters as given for genus. Male unknown.

Holotype: Female, USNM 61939, Cinchona, Jamaica, May 9, 1941, E. A. Chapin.

As in the genus *Corcovadocola* Carvalho, 1948, whose females are brachypterous, the males of *Brachyfulvius* are expected to be macrop-terous.

I take pleasure in naming this species for Dr. E. A. Chapin, who collected this interesting new genus and species of mirid.

Peritropoides, new genus

Cylapinae, Fulviini. Species of small size, body ovoid, smooth, beset with rigid semierect pubescence. Head inclined and pointed in front, vertex convex and inclined towards frons, posterior margin straight, frons strongly inclined in the same level of clypeus; eyes

divergent anteriorly, touching anterior angles of pronotum; seen from side, the eye is compressed and touches the gula below or nearly so. Rostrum reaching middle of abdomen or slightly beyond, the first segment thicker than the others, reaching slightly beyond the base of anterior coxae, remaining segments about subequal in length.

Antennae inserted a little above inferior line of orbita, touching anterior margin of eye, segment I very short, reaching about apex of clypeus, segment II subequal in thickness to the first and three times longer, linear, segments III and IV more slender, the fourth twice as long as third or so, the whole antenna covered by very short pubescence.

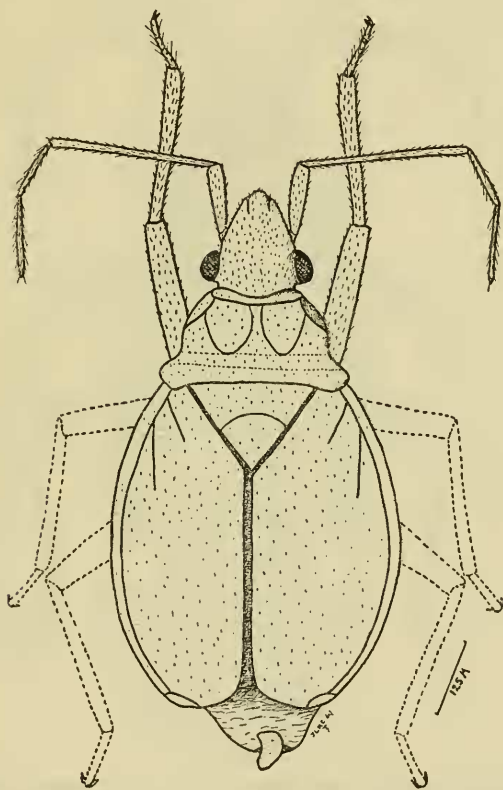


Figure 72.—*Brachyfulvius chapini*, new genus and new species, female, holotype; seen from above.

Pronotum slightly inclined towards the head, collar present, widest at middle and narrowed towards the sides, calli area somewhat raised on two anterior thirds of pronotum, lateral margins of disc rounded and declivous, posterior margin rounded at lateral angles, emarginate in front of mesoscutum; the latter prominent, carinate transversally at middle; scutellum relatively small, slightly convex.

Hemelytra smooth, densely pubescent, embolium more distinct towards the base, cuneus as long as wide at base, fracture distinct, incisure obsolete; membrane biarcolate, very minutely pubescent (iridescent under reflected light).

Legs relatively short, the posterior femora incrassate, tibiae with slender spines and common pubescence, tarsi very long, claws of the Cylapinae type. Cleft of anterior coxae deeply incised.

Type of genus, *Peritropoides annulatus*, new species.

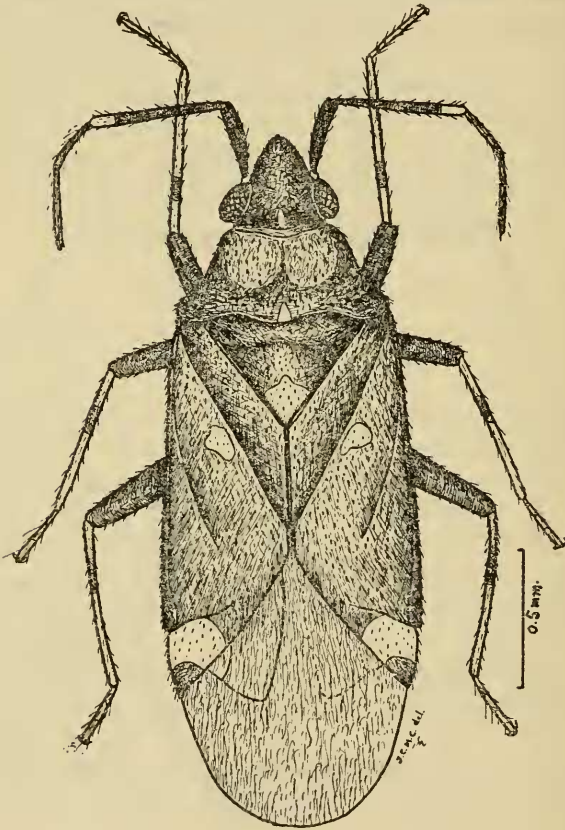


Figure 73.—*Fulvius albonotatus*, new species, male, holotype.

This genus is very near *Peritropis* Uhler, 1891, being easily distinguished, however, by the presence of a distinct collar, sides of pronotum not carinate, calli not raised, narrow embolium, vertex smooth, and body surface not shagreen.

Peritropoides annulatus, new species

PLATE 15,B

Characterized by its color, size, and structure of head.

Female: Length 2.2 mm., width 0.9 mm. Head: Length 0.2 mm., width 0.3 mm., vertex 0.22 mm. Antennae: Segment I length 0.1 mm.; II, 0.4 mm.; III, 0.2 mm.; IV, 0.3 mm. Pronotum: Length 0.3 mm., width at base 0.8 mm. Rostrum: Length 1.0 mm., segment I length 0.25 mm.; II, 0.28 mm.; III, 0.25 mm.; IV, 0.25 mm.

Color brownish with whitish spots or areas; head brown on vertex with two whitish spots bordering eye, clypeus and frons with brown and whitish areas, sides of head, clypeus, and first segment of rostrum reddish brown, remaining rostral segments yellowish; eyes dark brown; first antenna brown with whitish apex, second antenna with three whitish and two brown rings, third and fourth antennae brown with whitish apices; pronotum brown, especially at middle and lateral margins, with yellowish spots, the posterior margin with three distinct whitish spots, one adjacent to each lateral angle of mesoscutum and the third median; mesoscutum also with two whitish spots at base; scutellum brown with whitish apex; hemielytra with clavus and basal half of corium white with small brown dots, apical portion of corium and embolium brown to reddish brown (except a white spot on apex of embolium and external apical angle of corium reaching the middle of base of cuneus), cuneus reddish brown with extreme apex white; membrane infumate; underside darkish brown, apex of coxa reddish, trochanters and extreme apex of femora whitish, the posterior pair noticeably darker, tibiae yellow with a small black ring near base and a large one near middle, the anterior pair with a median and two basal rings; whitish apex of posterior femur with a reddish to brown ring.

Morphological characters as given for genus. Male unknown.

Holotype: Female, USNM 61940, Colombia (on orchid), intercepted at San Francisco, Calif., Dec. 16, 1940.

Peritropoides quadrinotatus, new species

FIGURES 74,b, 75,e,f, 76,b,f

Characterized by its color, dimensions, and structure of head.

Male: Length 3.0 mm., width 1.1 mm. Head: Length 0.3 mm., width 0.5 mm., vertex 0.24 mm. Antennae: Segment I length 0.2 mm.; II, 0.6 mm.; III, 0.3 mm.; IV, 0.5 mm. Pronotum: Length 0.4 mm., width at base 1.0 mm. Rostrum: Length 1.7 mm.; segment I length 0.42 mm.; II, 0.45 mm.; III, 0.42 mm.; IV, 0.45 mm.

Color yellowish mottled with brown, reddish marmorate on embolium, the hemielytra with four brown areas; head yellowish on vertex and frons (except for a small central brown spot at middle of vertex and two other bordering eye near base of frons), sides of head above antennae with a reddish brown fascia reaching from eye to clypeus, the latter variegated with red becoming solid reddish brown

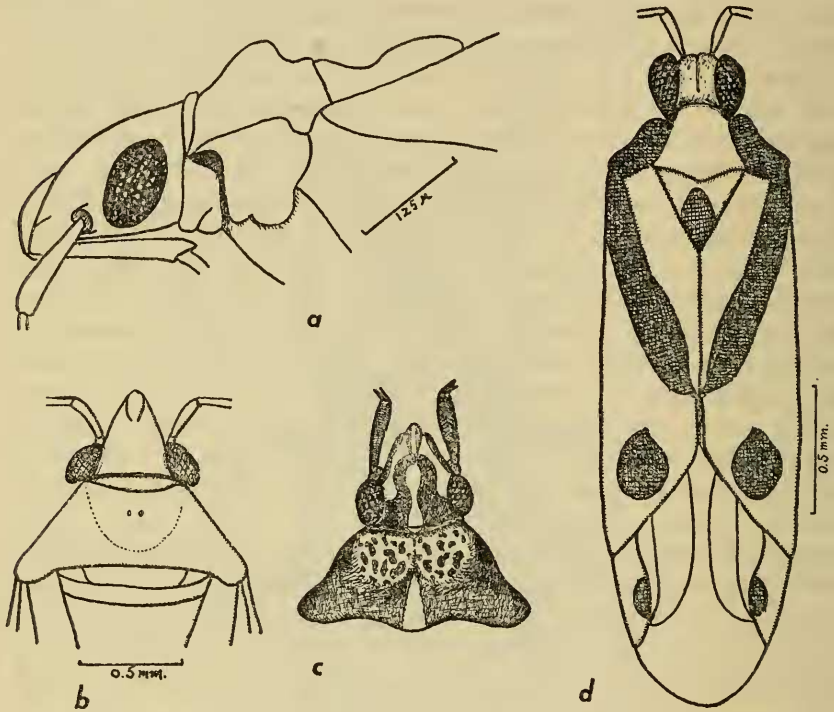


Figure 74.—*a*, *Brachyfulvius chapini*, new species, side view of head and pronotum; *b*, *Peritropoides quadrinotatus*, new species, head and pronotum from above; *c*, *Fulvius ornatifrons*, new species, head and pronotum of female, holotype; *d*, *Vannius oculatus*, new species, showing color pattern.

towards the apex, genae and first rostral segment yellowish brown, gula brown, the remaining rostral segments yellowish; eyes brown; antennae yellowish, the apex of first joint with a reddish ring; pronotum variegated with brown, two roundish brown spots are to be seen over the collar and a brownish fascia behind each eye occupying also lateral margin of pronotum (on anterior margin, contiguous to eye there are two short whitish fasciae below and above the pronotal margin, which is also whitish), pleural region bark brown; mesoscutum with brown spots at basal angles and a more pronounced dark brown



A



B

A, *Brachyfulvius chapini*, new genus and new species, female, holotype. B, *Peritropoides annulatus*, new species, female, holotype.

median portion separated from angles by a whitish raised spot; scutellum brown with faint yellowish spots and whitish apex; hemelytra yellowish, variegated with brown externally and vice versa interiorly, clavus with two large median brown spots, embolium marmorated with red, corium with a faint brownish area beyond apex

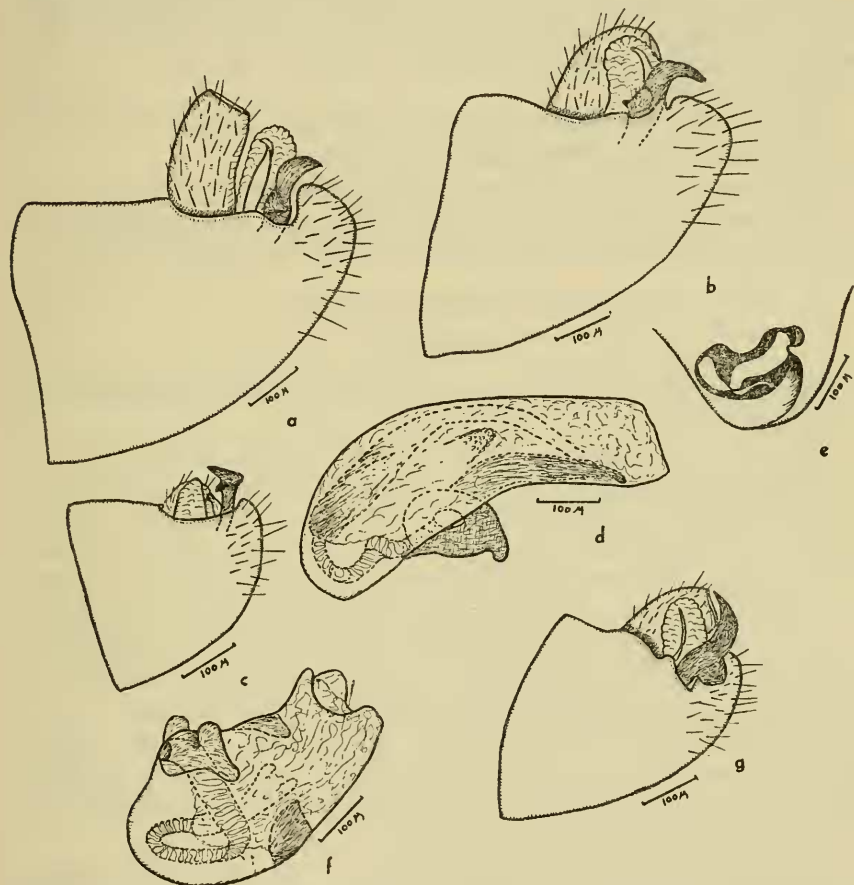


Figure 75.—Male genitalia: a, pygophore of *Fulvius castaneus*, new species, left side, lateral view; b, pygophore of *F. quadristillatus* (Stål), left side, lateral view; c, pygophore of *F. albonotatus*, new species, left side, lateral view; d, aedeagus of *F. castaneus*, new species; e, apex of pygophore of *Peritropoides quadrinotatus*, new species, seen from above; f, aedeagus of *P. quadrinotatus*; g, pygophore of *Fulvius bisbistillatus* (Stål), left side, lateral view.

of cubital vein, cuneus whitish with reddish apex and a well marked dark brown spot on inner basal angles; membrane infumate, the veins yellowish; underside of body yellowish at median line, the tergites becoming darker towards the upper surface, legs yellowish (coxae and trochanters), femora and tibiae mutilated.

Head more horizontal than in the preceding species, the eyes larger, straight posteriorly, coarsely granulose, second antennal segment slightly incrassate towards the apex, body pubescence long and semi-erect, eyes reaching the gula below.

Aedeagus (fig. 75, *f*) of the Cylapinae type, short and thick, without chitinized teeth internally. Left clasper (figs. 75, *e*, 76, *b*, *f*) curved, pointed apically, with a median short prong. Right clasper small, roundish apically, with a few setae.

Female unknown.

Holotype: Male, USNM 61941, Barro Colorado Island, Canal Zone, Panamá, July 1923, R. C. Shannon.

This species differs from *Peritropoides annulatus*, new species, by its color and structure of head. Its trivial name is derived from the four brown spots to be seen on clavus and internal angles of cuneus.

Vannius oculatus, new species

FIGURE 74,*d*

Characterized by its color, structure of eyes, and yellow first antennal segment.

Female: Length 2.7 mm., width 0.8 mm. Head: Length 0.3 mm., width 0.4 mm., vertex 0.14 mm. Antennae: Segment I length 0.2 mm.; II, 1.0 mm.; III, 1.3 mm.; IV, 0.4 mm. Pronotum: Length 0.2 mm., width at base 0.7 mm. Rostrum: Length 0.71 mm.; segment I length 0.17 mm.; II, 0.25 mm.; III, 0.14 mm.; IV, 0.14 mm.

Color yellowish with red areas; eyes, sides of pronotum, median portion of scutellum, corium bordering clavus and a small fascia on the latter joining the corial fascia, a round spot on apex of corium and a smaller one on internal margin of cuneus, frons and sides of head, pleural region, apex of abdomen, and base of same on upper surface, red; antennae (except red ring near apex and whitish apical portion), rostrum, coxae, and middle circular band of abdomen, yellow. The third antennal segment is fuscous at base.

Head small, sulcate on frons and vertex, eyes very large, elongate, narrowed posteriorly, longer than the head as seen from above; seen from side, eyes distant from gula by a space about equal to length of eye, lorum strongly enlarged, gula very short. Rostrum reaching very slightly beyond the hind coxae.

Pronotum with anterior margin raised and hooded over the vertex between the eyes, emarginate behind each eye, lateral margins rounded and slightly emarginate at middle, the posterior margin biconcave, humeral angles produced; mesoscutum exposed; scutellum elongate with acute apex.

Hemelytra elongate, the margins subparallel, cuneus very long, almost three times as long as wide at base, embolium very narrow, linear. Legs mutilated. Male unknown.

Holotype: Female, USNM 61942, Costa Rica (on bananas), intercepted at New York, May 11, 1936.

This species is similar to *Vannius rubrovittatus* Distant, 1893, but easily distinguished by the yellow first antennal segment, the eyes pointed posteriorly, and different color markings of apex of corium and cuneus.

Fulvius albonotatus, new species

FIGURES 73, 75, c, 76, d, f

Characterized by its small size, whitish spots of head and pronotum, and male genitalia.

Male: Length 2.4 mm., width 1.0 mm. Head: Length 0.3 mm., with 0.4 mm., vertex 0.21 mm. Antennae: Segment I length 0.2 mm.; II, 0.5 mm.; III, 0.2 mm.; IV, 0.4 mm. Pronotum: Length 0.2 mm., width at base 0.7 mm. Rostrum: Length 1.0 mm., segment I length 0.25 mm.; II, 0.28 mm.; III, 0.28 mm.; IV, 0.28 mm.

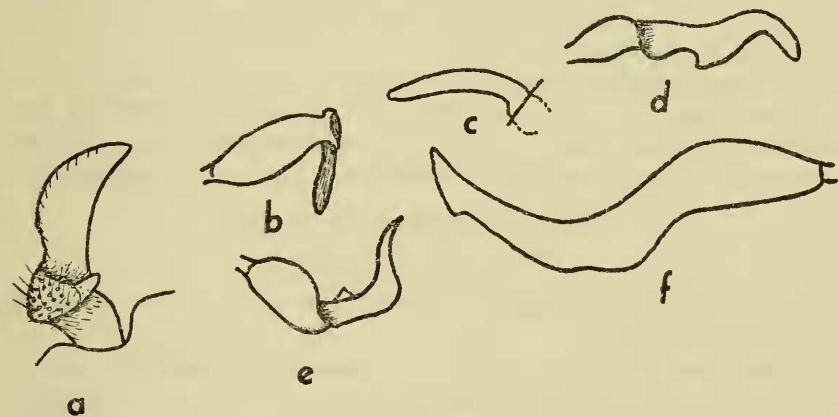


Figure 76.—Male claspers: a, *Fulvius castaneus*, new species, left clasper; b, *Peritropoides quadrinotatus*, new species, left clasper, dorsal view; c, *Fulvius castaneus*, new species, right clasper; d, *F. albonotatus*, new species, left clasper, dorsal view; e, *Peritropoides quadrinotatus*, new species, left clasper, ventral view; f, *Fulvius albonotatus*, new species, left clasper, side view.

Color brown, distinctly darker on head and pronotum; head dark brown with a whitish, short fascia on vertex between the eyes, pronotum also dark brown with a whitish spot touching posterior margin on median line; antenna with segment I reddish brown, lighter at apex (but not white), segment II yellowish sulphurescent, whitish at apex and lighter at base, third and fourth segments fuscous; mesoscutum dark brown at middle, lighter on basal angles; scutellum dark brown

with whitish apex; hemielytra chestnut brown with a roundish small white area near base of corium on level with middle portion of clavus, cuneus whitish on basal half, reddish brown apically; membrane infumate; underside with pleural portion dark brownish, abdomen reddish brown, coxae white (except extreme base), femora brown with reddish apices, tibiae pale, each with a brown to fuscous ring near base, tarsi yellow.

Head strongly pointed, first antennal segment incrassate, narrowed toward the base, second linear, about half as thick as the first, remaining joints very slender. Pronotum slightly biconcave posteriorly. Hemielytra with embolium enlarged towards the apex, cuneus about as long as wide. Rostrum reaching beyond posterior coxae.

Aedeagus similar to that of *Fulvius castaneus*, new species (fig. 75, *d*); left clasper as seen in figures 76, *d, f*. Pygophore seen from left lateral aspect as in figure 75, *c*.

Female slightly more robust than male but similar in color and general appearance.

Holotype: Male, USNM 61943, Barro Colorado Island, Canal Zone, Panamá (on *Heliconia mariae* flowers), June 1940, J. Zetek, No. 4667. Allotype: Female, same data. Paratypes: 9 ♂♂ and 3 ♀♀, same data. Also 1 ♂, Panamá (with *Hevea* and other seeds), intercepted at Hoboken, N. J., Sept. 8, 1950.

This species differs from all others in the genus by its small size, color markings, and male genitalia. It is easily distinguished from *Fulvius lunulatus* Uhler, 1891, by its color pattern of the head and pronotum. These structures are uniformly dark in the latter species.

***Fulvius castaneus*, new species**

FIGURE 75, *a, d*; 76, *a, c*.

Characterized by the very faint whitish area on corium, large size, and male genitalia.

Male: Length 3.9 mm., width 1.5 mm. Head: Length 0.4 mm., width 0.6 mm., vertex 0.21 mm. Antennae: Segment I length 0.4 mm.; II, 1.0 mm.; III, 0.4 mm.; IV, 0.7 mm. Pronotum: Length 0.5 mm., width at base 1.1 mm. Rostrum: Length 2.0 mm., segment I length 0.50 mm.; II, 0.57 mm.; III, 0.57 mm.; IV, 0.42 mm.

Color blackish brown; head, pronotum, and antennae (except whitish apical one-fourth of second segment) unicolorous; mesoscutum with two lighter areas; scutellum unicolorous, dark brown; hemielytra brown to cinnamon, with a faint whitish area on corium in level with middle of clavus, apex of the latter also lighter, cuneus reddish brown apically, white on basal third; membrane infumate; underside black-brown on anterior half and reddish brown on abdomen; posterior and